CURRENT LISTING OF CLAIMS

1. (original) A method of classifying a population by drug responsiveness, comprising:

(a) determining a multidimensional coordinate point representative of the expression levels of a sample of molecules in a specimen from individuals in a population of individuals administered a drug; and

(b) determining a drug response-associated reference expression region of a group of individuals in said population using said multidimensional coordinate points, thereby classifying said group of individuals into a drug response reference population.

2. (Original) The method of claim 1, further comprising the step of correlating said group of individuals with a response to said drug.

3. (Original) The method of claim 2, wherein said response is an adverse drug reaction.

4. (Original) The method of claim 2, wherein said response is alleviation of a sign or symptom associated with a condition of an individual administered said drug.

5. (Original) The method of claim 1, further comprising the step of inputting the expression level of said molecules in said sample.

6. (Original) The method of claim 1, further comprising the step of determining the expression level of said molecules in said sample.

7. (Original) The method of claim 6, wherein the expression levels of said sample of molecules in said specimen are determined by direct comparison with reference expression levels correlated with health-associated reference expression intervals of said molecules in said sample.

8. (Original) The method of claim 6, further comprising the step of contacting said specimen with a target.

9. (Original) The method of claim 1, wherein said specimen is selected from the group consisting of leukocytes, blood, and serum.

10. (Original) The method of claim 8, wherein said target is an array.

11. (Original) The method of claim 1, wherein said molecules in said specimen comprise nucleic acids.

12. (Original) The method of claim 8, wherein said target comprises nucleic acid ligands.

13. (Original) The method of claim 1, wherein said molecules in said specimen comprise polypeptides.

14. (Original) The method of claim 8, wherein said target comprises antibody ligands.

15. (Original) The method of claim 1, wherein said molecules in said specimen comprise small molecules.

16. (Original) A method of classifying a population by drug responsiveness, comprising:

(a) determining a multidimensional coordinate point representative of the expression levels of a sample of molecules in a specimen comprising leukocytes from individuals in a population of individuals administered a drug; and

(b) determining a drug response-associated reference expression region of a group of individuals in said population using said multidimensional coordinate points, thereby classifying said group of individuals into a drug response reference population.

17. (Original) A method of predicting a drug response in an individual, comprising:

(a) determining a multidimensional coordinate point representative of the expression levels of a sample of molecules in a specimen from an individual treated with a drug;

(b) comparing said multidimensional coordinate point to a drug response-associated reference expression region for individuals treated with said drug; and

(c) determining if said multidimensional coordinate point for said individual is within or outside said drug response-associated reference expression region, wherein said multidimensional coordinate point within said drug response-associated reference expression region indicates said individual has a substantially similar response to said drug as individuals in a drug response reference population used for said drug response-associated reference expression region.

18. (Original) The method of claim 17, further comprising the step of inputting the expression level of said molecules in said sample.

19. (Original) The method of claim 17, further comprising the step of determining the expression level of said molecules in said sample.

20. (Original) The method of claim 19, wherein the expression levels of said sample of molecules in said specimen are determined by direct comparison with reference expression levels correlated with health-associated reference expression intervals of said molecules in said sample.

21. (Original) The method of claim 17, further comprising the step of contacting said specimen with a target.

22. (Original) The method of claim 17, wherein said specimen is selected from the group consisting of leukocytes, blood, and serum.

23. (Original) The method of claim 21, wherein said target is an array.

24. (Original) The method of claim 17, wherein said molecules in said specimen comprise nucleic acids.

25. (Original) The method of claim 21, wherein said target comprises nucleic acid ligands.

26. (Original) The method of claim 17, wherein said molecules in said specimen comprise polypeptides.

27. (Original) The method of claim 21, wherein said target comprises antibody ligands.

28. (Original) The method of claim 17, wherein said molecules in said specimen comprise small molecules.

29. (Original) A method of predicting a drug response in an individual, comprising:

(a) determining a multidimensional coordinate point representative of the expression levels of a sample of molecules in a specimen comprising leukocytes from an individual treated with a drug;

(b) comparing said multidimensional coordinate point to a drug response-associated reference expression region for individuals treated with said drug; and

(c) determining if said multidimensional coordinate point for said individual is within or outside said drug response-associated reference expression region, wherein said multidimensional coordinate point within said drug response-associated reference expression region indicates said individual has a substantially similar response to said drug as individuals in a drug response reference population used for said drug response-associated reference expression region.

30. (Original) A method of categorizing drug responsiveness in a population, comprising:

(a) determining a multidimensional coordinate point representative of the expression levels of a sample of molecules in specimens from a population of individuals treated with a drug;

(b) identifying a first group of individuals having a substantially similar response to said drug; and

(c) determining a drug response-associated reference expression region of said first group of individuals using said multidimensional coordinate points of said first group of individuals, thereby categorizing the drug responsiveness of said first group of individuals.

31. (Original) The method of claim 30, further comprising the steps of:

(d) identifying a second group of individuals having a substantially similar response to said drug, said drug response in said second group being different than the drug response of said first group; and

(e) determining a drug response-associated reference expression region of said second group of individuals using said multidimensional coordinate points of said second group of individuals, thereby categorizing the drug responsiveness of said second group of individuals.

32. (Original) The method of claim 31, further comprising optionally repeating steps (d) and (e) one or more times for an additional group of individuals having a substantially similar response to said drug, said drug response in said additional group of individuals being different than the drug response of identified groups.

33. (Original) The method of claim 30, further comprising the step of inputting the expression level of said molecules in said sample.

34. (Original) The method of claim 30, further comprising the step of determining the expression level of said molecules in said sample.

35. (Original) The method of claim 34, wherein the expression levels of said sample of molecules in said specimen are determined by direct comparison with reference expression levels correlated with health-associated reference expression intervals of said molecules in said sample.

36. (Original) The method of claim 30, further comprising the step of contacting said specimen with a target.

37. (Original) The method of claim 30, wherein said specimen is selected from the group consisting of leukocytes, blood, and serum.

38. (Original) The method of claim 36, wherein said target is an array.

39. (Original) The method of claim 30, wherein said molecules in said specimen comprise nucleic acids.

40. (Original) The method of claim 36, wherein said target comprises nucleic acid ligands.

41. (Original) The method of claim 30, wherein said molecules in said specimen comprise polypeptides.

42. (Original) The method of claim 36, wherein said target comprises antibody ligands.

43. (Original) The method of claim 30, wherein said molecules in said specimen comprise small molecules.